for today's decision makers . . .

Relational Data Management and Business Graphics

INFOgraf

INFOgraf

Turning YOUR business information into pictures for better analysis and superior presentations.

INFOgraf is a conversational data management package with business charts and graphs. The data management capability uses relational database concepts and includes data creation, inquiry and update, input forms processing, report generation, and application programming. Most importantly, it gives you immediate access to EXISTING DATA.

The graphics capability offers features for creating data analysis pictures as well as publication quality graphics. Supported features are full color, high quality fonts, multiple charts in a single picture, complete labelling and annotation, multiple curves with shading between curves, primitives and 3D viewing commands for special purpose graphics. Pictures can be saved in a picture library for later viewing, allowing you to position, scale, translate, and superimpose several pictures.

EASY TO LEARN — EASIER TO USE

Uses English commands, menus and forms, and graphics input devices with options to switch modes. Multi-level help facility available on-line for easy reference.

FLEXIBLE — WIDE RANGE OF GRAPHICS FOR PRESENTATION

Single commands for efficient creation of pictures using intelligent defaults. Explicit specification and control of output appearance for elaborate pictures.

PORTABLE — HOST AND DEVICE INDEPENDENT

Available on PRIME, VAX, IBM, Harris, and Honeywell. Graphics drivers available for Tektronix, RAMTEK, Calcomp, Chromatics, Gensico, Imlac, Megatek, AED, Veratec, Applicon, Houston Instruments and several others.

ECONOMICAL — FOR MANAGERS, PROGRAMMERS, AND SECRETARIES

INFOgraf can reduce your application development time by a factor of 10.

INFOgraf costs much less than packages which only offer HALF THE SAME CAPABILITIES.

Features everyone can use

LINE GRAPHS • PIE CHARTS • BAR GRAPHS

explicit titling, labelling, and legend definition
exact positioning and sizing
interactive refinement

TEXT LAYOUT • ANNOTATION • SLIDES

font selection and sizing
justification and spacing
zooming, panning, and 3D orientation

THEMATIC MAPPING

cartographic and demographic data bases
maps in color and with pattern fill

ORGANIZATIONAL CHARTS

up to 9 layers deep
variable text quality control
applicable to other interrelated structures

SPECIAL GRAPHICS • APPLICATION DEVELOPMENT

line, markers, polygons, circle, and rectangles
window, viewport and 3D viewing
attribute setting, device inquiry, and debugging

HELP ME DECIDE.

Please mail me more information on INFOgraf.

NAME _____

COMPANY _____

ADDRESS _____

CITY _____ **STATE** _____ **ZIP** _____

Types of Computer Systems _____

Types of Graphics Devices _____

graphics concepts
6797 N. HIGH STREET, SUITE 350
WORTHINGTON, OHIO 43085
Telephone (614) 885-2416

INFOgraf

for today's sophisticated
DECISION MAKER

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY CARD
FIRST CLASS PERMIT NO. BR 946 COLUMBUS, OHIO

graphics concepts
6797 N. HIGH STREET, SUITE 350
WORTHINGTON, OHIO 43085

the dawn of a new era . . .

For Managers, Programmers, and Secretaries

For the Beginner — Immediate Productivity

The first computers were programmed by wizards using seemingly endless strings of 0s and 1s, taking years to program the simplest tasks. More recently, COBOL programmers with only a year or so of experience have been able to respond to simple requests in a few days or weeks.

Now people in their homes, secretaries and business managers can create their own files, enter records, retrieve information and generate reports without training. Or, they can query and report on information that they have previously had access to only through the programming staff.

INFO'S FEATURES FOR THE BEGINNER

ENGLISH COMMANDS:
Found in the dictionary and used by everyone.

DATA DICTIONARY:
Allows you to use or define your own file structure.

DATA ENTRY:
Prompts item by item to enter name, social security number, recipe title, student ID#, or whatever information you need.

DATA UPDATE:
You can alter information as it changes, or in case of error.

QUERY:
Select all students who have not paid their tuition, or recipes containing the word chicken, or bills that are over 30 days old and more than $100.

DISPLAY ON THE SCREEN or PRINT ON A PRINTER:
All or part of the information from each record.

REPORT GENERATOR:
That prompts column by column to display any information in your files such as name, rate-of-pay times hours-worked, or sales by product, region, area, and price — all with subtotals and grand totals.

MULTIPLE FILES:
Can be connected together so you can create a report which includes the name, city, and telephone number from the name and address file, and the present you gave last year from the Christmas present file.

SORTING:
Any lists or reports can be produced in any order you wish by simply saying SORT ON NAME, CITY, PRODUCT, SALESPERSON.

How is this possible? Many people are using computers for the first time just by following the simple instructions in the Primer.

PRIMER:
A very friendly tutorial for the beginner who may never have seen a computer or a terminal. Stepped instruction, and many examples lead the reader through defining files, adding records, and generating and changing reports. This primer humanizes the computer and allows the new user to have fun and be more productive than ever before imagined.

POCKET REFERENCE CARD:
The pocket reference card is a handy tool for reminding you of the INFO commands without having to look back through the whole Primer. This card, along with the prompts given to you by the computer as you go, allows you to manage your own information and generate your own reports.

For the Applications Programmer — Cuts Development Time

INFO is the first high level language with all the functions required for your most complex applications. In development since 1971, INFO is a truly complete high level application development language.

The features designed especially for you allow you to respond to simple requests for reports in minutes instead of hours, and to do turnkey applications in weeks instead of months.

Hundreds of applications are now running in INFO that would still be in design or debugging stages in any other language.

FEATURES WHICH GREATLY INCREASE YOUR PRODUCTIVITY

INPUT FORM:
Is a screen painter for development of data entry formatted screens in minutes.

REPORT GENERATOR:
Allows for 5 levels of subtotals, averages, running totals, multiple report lines from a single record and variables in titles.

RELATE:
Puts you in touch with up to 10 files simultaneously for data entry, transaction processing and table lookup.

EXISTING FILE MANAGEMENT CAPABILITY:
INFO handles any file structure supported by the host operating system from direct access to multiple indexed files.

PASSWORD PROTECTION:
For items in each record or for commands in the INFO language.

MENUS:
May be developed to create thoroughly user oriented applications for people with no programming backgrounds.

Other features that speed application development:

BINARY SEARCH
IF ELSE ENDIF
ARRAY PROCESSING
GOTO LABEL
TABLE LOOKUP
DO — DOEND
RELATE TO ARRAYED ITEMS
EDITING FOR PROGRAMS
VARIABLES IN REPORT TITLES
COUNT, AVERAGE AND RUNNING TOTALS
40 INTERNAL VARIABLES
INTERFACES TO USER WRITTEN SUB-ROUTINES (Cobol, Fortran, etc.)
CALCULATIONS OF 20 NESTED PARENTHESES AND EXPONENTIATION
PROGRAM CHAINING

USER MANUAL:

This document is for the novice or super sophisticated application development programmer. Instructive examples and sample programs give the programmer everything needed to develop simple applications or complex accounting, inventory, order entry or any imaginable business application in a fraction of the time required by conventional programming languages. The full manual will have a COBOL or FORTRAN Programmer deep in the most sophisticated applications in two or three days. Talk to some of our 200 customers who are saving days, months, and years of programming time.

For the User — Provides Applications Now!

Like no other language, INFO thoroughly integrates the simple, yet powerful user oriented functions with the full range of programmer utilities required for the most complex applications.

Data entry screens are developed in minutes instead of days. Complex reports are designed, generated, and changed in hours instead of weeks. And now for the first time, INFO brings the dawn of a new era and puts all of the same power into the hands of the expert application programmer.

How does all of this apply to you?

IF YOU NEED:

AN ENTIRE NEW COMPUTER INSTALLATION:

Buy a good minicomputer and INFO. THAT'S IT! Then Henco, one of our distributors, or you can modify existing INFO programs or develop an entire system to meet your needs — at a fraction of the time and cost of using conventional software packages or programming languages.

ACCOUNTING:

Henco has developed extremely user oriented standard accounting packages.

PAYROLL	GENERAL LEDGER
ACCOUNTS PAYABLE	ACCOUNTS RECEIVABLE

You or Henco or one of our distributors can quickly install and initialize these packages or modify them to meet your requirements.

ANY APPLICATION WHATSOEVER:

Henco and our distributors and customers have developed applications in many areas. MANUFACTURING, INVENTORY, ORDER ENTRY, CREDIT UNION, SAVINGS AND LOAN, INSURANCE AGENCY, STUDENT RECORDS, LIBRARIES, WORD PROCESSING INTERFACES and many many more. We can develop these for you, or you can develop them yourself if you wish. We can put you in touch with the INFO users group to see what application might be available from our more than 200 users. Many of these will be free of charge.

DISTRIBUTED BY:

GRAPHICS CONCEPTS • 6797 N. HIGH STREET, SUITE 350 • WORTHINGTON, OHIO 43085 • (614) 885-2416

INFO

RELATIONAL DATABASE MANAGEMENT SYSTEM
AND
APPLICATION DEVELOPMENT LANGUAGE

FEATURES EVERYONE CAN USE

DATA DICTIONARY
System prompts to
create a file structure

DATA ENTRY
ADD:
prompts field by field
date handling & validation

INPUT FORM screen painter
range checking
table lookup & validation
non-duplication specifier

DATA UPDATE
UPDATE entire working set
UPDATE individual records
every item name is an
access key
PASSWORD protection on
item level

QUERY
CONDITIONAL RECORD
selection
LOGICAL operators:
LT GE LE GT
EQ CN NE NC
AND/OR/XOR record selection

POWERFUL REPORT GENERATOR
USER PROMPTS to design simple
or complex reports
TOTALS and 5 levels of subtotals
FIVE LINE report titles or
column headings
Multiple lines per record

MULTIPLE FILES
RELATES up to 10 files at a
time
ONE file can be related by
one item & another by another
USER can ACCESS, DISPLAY, or
UPDATE any field in related
datafile

SORT
16 fields
ASCENDING or DESCENDING order

EXISTING FILES
HANDLES existing files (REL,
SEQ, or ISAM (MIDAS)

DATA RETRIEVAL
LISTING for selected records
DISPLAY/PRINT of individual
items in each record

MORE FEATURES
ESPECIALLY FOR PROGRAMMERS

40 Internal Variables
Grid provided in INPUT FORM
IF THEN ELSE
DO WHILE
ARRAY processing
Password Protected commands
Update via INPUT FORM
GO TO LABEL
Interfaces to user-written
subroutines (Cobol, Fortran,
etc.)

Handles any existing files
All data types
Binary Search Capability
TABLE look-up
MENU Processing
RELATIONS on ARRAYed items
TRACE mode
Editing for programs
Variables in report titles
Program Chaining
Fast, Fast, Fast Execution

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